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REMARKS

Claims 1, 3-14, and 16-20 are pending in the application. Claims 1, 3-10, 12-14 and 16-20 stand rejected. Claim 11 is objected to but otherwise contains allowable subject matter.

Claims 1 and 14 are independent claims from which all other claims depend. Claims 1 and 14 have been amended herein to incorporate the allowable subject matter of claim 11. As a result, claims 10 and 11 have been cancelled. Further, new claims 21 and 22 have been added which recite features similar to those set forth in claims 1 and 14, and which are substantially different from prior art relied upon in the Office Action dated January 9, 2006.

Independent claims 1 and 14 have similar limitations and will therefore be described together. Each regards a convoluted boot made of an elastic material for sealing an annular joint chamber of a universal joint. The boot includes a plurality of annular folds wherein each of the annular folds has a first outer flank facing the first collar, and a second annular flank facing the second collar. At two adjoining annular folds, the two opposed annular flanks each include a plurality of raised portions projecting from the uniform annular face (claim 1), or a plurality of recesses which are set back from the uniform annular face (claim 14). The raised portions or the recesses of one flank and the raised portions or recesses of the opposing flank are positioned on circles with different radii. In this way, the opposed annular flanks of two adjoining folds are held at a distance from one another by the raised portions or by the areas between the recesses. In both cases, the development of noise in the articulated convoluted boot, particularly under wet or rainy conditions, is minimized. As acknowledged in the Office Action, this feature, which was previously presented in claim 11, is not disclosed or suggested in any of the references relied upon in the Office Action. Accordingly, independent claims 1 and 14 and dependent claims 3-9, 12-14 and 16-20 should be allowed.

New independent claims 21 and 22 similarly provide that at two adjoining annular folds, the plurality of raised portions (claim 21) or recesses (claim 22) are provided on only one of the opposing flanks, and that the plurality of raised portions or recesses are positioned on circles with different radii. In other words, only one of the opposed flanks

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will have concentric circles of raised portions or recesses. This configuration, likewise, results in a noise reduction when the boot is articulated and operated under wet conditions. Again, none of the prior art references relied upon in the Office Action disclose or suggest these claimed features. Accordingly, new claims 21 and 22 should also be allowed over the art of record.

Specifically, in contrast to independent claims 1, 14, 21 and 22 of the present application, U.S. Patent 1,902,323 to DeMonge discloses a bellows made of a flexible material, wherein the bellows includes folds and each fold as two flat portions 6a and connecting bends 6b, 6c. Figures 5 and 6 of DeMonge show the folds which are reinforced by transverse grooves or ribs. The ribs and grooves of adjacent flat portions of the folds are staggered so as to permit the flat portions to be brought closer together ('323 patent, column 2, lines 79-86). That is, the DeMonge reference teaches away from the present application by providing a structure whereby the adjacent flat portions can be brought in register and closer together, whereas the solution of the present application results in two adjoining annular folds being held in at a distance from one another by the raised portions. Further, each of the present independent claims differs from DeMonge in that the present claims require that the raised portions or recesses be positioned on circles with different radii either on one flank only, or on both flanks which oppose each other. Accordingly, the rejection of claims 1, 7, 12-14, 17 and 20 under 35 U.S.C. §103 in view of DeMonge should be withdrawn.

For similar reasons, the rejection of claims 1, 3, 6-8, 14 and 16-20 under 35 U.S.C. §102; and the rejection of claims 4, 5 and 9 under 35 U.S.C. §103 in view of Zollinger, U.S. Patent 5,098,344 should also be withdrawn. The Zollinger reference discloses a convoluted boot for a universal joint. The sidewalls 56, 58 of the convolutions 38, 40 have spaced ribs 62, 64 arranged in a radial spoke pattern. The ribs are resilient, thin-walled protrusions molded directly to the sidewalls 56, 58 to project in a generally axial direction. During articulation of the joint, the ribs contact the sidewall of the adjacent sidewall. Because there is limited turning movement of one convolution relative to the adjacent convolution, the ribs resultantly bend as illustrated in Figure 5B so that frictional sidewall abrasion and wear between adjacent walls is reduced. Zollinger does not disclose any recesses whatsoever in the convolutions.

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Accordingly, all of the claims are novel and non-obvious in view of Zollinger because claims 1 and 21 require that the raised portions are positioned on circles with different radii either on one flank only or on both flanks opposing each other, which the Zollinger reference does not disclose or suggest. Furthermore, claim 1 differs from Zollinger in that the raised portions comprise burrows which are advantageous over the ribs of Zollinger in that they are subjected to less wear because they do not bend like the ribs of Zollinger as shown in Figure 5B. Further, the burrows can be produced more easily than the ribs of Zollinger.

Similarly, independent claims 14 and 22 require that the recesses are positioned on circles with different radii either on one flank only, or on both flanks opposing each other, which the Zollinger reference does not disclose or suggest. With respect to claim 14, it further differs from Zollinger in that the recesses are designed as indentations. As noted above, the Zollinger reference does not disclose any recesses whatsoever.

The Applicant therefore submits that claims 1, 3-9, 13,14, and 16-22 are allowable because the prior art relied upon does not disclose or suggest each and every feature of Applicant's claimed invention. The rejections under 35 U.S.C. §102 and §103 should be withdrawn and a Notice of Allowance indicating the allowability of the pending claims should be issued. The Examiner is invited to telephone the Applicant's undersigned attorney at (248) 223-9500 if any unresolved matters remain.

Respectfully submitted,

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